

NOTES ON INSECT OCCURRENCES ON THE MISSISSIPPI
GULF COAST AND OFFSHORE ISLANDS¹

by

Bryant Mather²

213 Mt. Salus Drive, Clinton, Mississippi 39056

Dr. Gordon Gunter (1970) has written that, through the work of Dr. E. A. Richmond, "... The species of living organisms of Horn Island are better recorded than those of any large island on the South Atlantic and Gulf Coast." It is to be hoped that Dr. Richmond's work will inspire others to contribute much more to the knowledge of the fauna and flora of the Gulf Coast and its offshore islands. I give here a few notes to place some of Dr. Richmond's work in context, to recognize work by others, and to indicate the paucity of the data.

COLEOPTERA — Cicindelidae

The tiger beetles (Cicindelidae) are among the best known and most widely collected of any group of beetles. Yet R. L. Huber, editor of the quarterly *Cicindela*, wrote me in 1968: "Mississippi is one of the few states that has nothing published on Cicindelidae." Today, the only published lists of Mississippi Cicindelidae are those of Dr. Richmond (1962 p. 86, 1968 p. 234) in which five names are listed: *C. dorsalis sauleyi* (Guer.), *C. trifascia ascendens* (Lec.), *C. hamata lacerata* (Chd.), *C. h. monti* Vaurie, and *M. carolina* L. A recent summary (Mather 1970) indicated that records were available for 22 species from 35 counties of Mississippi. The additional available Gulf Coast records are:

Cicindela repanda Dej.: Harrison and Jackson Counties.

Cicindela punctulata Oliv.: Hancock and Harrison Counties.

Cicindela blanda Dej.: Jackson County.

Cicindela wapleri Lec.: All three counties.

C. dorsalis and *C. hamata* are known from Deer Island and Ship Island; *C. trifascia ascendens* is known from Ship Island.

NEUROPTERA

As was noted above to be the case with *Cicindelidae*, so far as I am aware, the only published lists of Mississippi Neuroptera are those by Dr. Richmond (1962 p. 79, 1968 p. 231). In these he reported the following:

¹Contribution No. 199, Bureau of Entomology, Division of Plant Industry, Florida Department of Agriculture and Consumer Services, Gainesville, Florida.

²Research Associate, Florida State Collection of Arthropods, Division of Plant Industry, Florida Department of Agriculture and Consumer Services, Gainesville, Florida.

Symphorobius amicus (Fitch) : The only other Mississippi record known to me is one female taken by R. and B. Taylor at Handsboro, Harrison County, in October 1966.

Chrysopa oculata Say: This is known from Gulfport and Biloxi.

Brachynemurus longicaudis (Burm) : The only other Mississippi records of this known to me are of specimens taken by R. and B. Taylor at Biloxi and Handsboro.

Myrmeleon crudelis (Walker) : This is also known from Biloxi and Ocean Springs (Taylors) and from Jackson and State College.

Paranthracis hageni (Banks) : Dr. Richmond's Horn Island record remains the only one from Mississippi known to me.

Heoclis americana (Drury) : The only supplementary Mississippi record that I know of is based on a specimen in the collection at Mississippi State University taken in Lumberton, Lamar County, in 1917 by O. A. Davis.

Utholodes hageni (Weele) : Widely taken throughout the state.

LEPIDOPTERA

The history of the study of Mississippi butterflies has been summarized by Mather and Mather (1958). Two early collectors, Frank Morton Jones and Harold L. O'Byrne, confined their work, in 1910 and 1921 and 1929-1933, respectively, to the Gulf Coast. As far as is known, they did not collect on offshore islands. Neither published his results. Forket (1900) published notes of his observations at Ocean Springs. Skinner (1920) published a report which I quote in full: "Mr. W. C. Dukes of Mobile, Alabama, has recently sent me two specimens of *Synatomidae* from a new locality. They were taken on Cat Island, Mississippi. They are *Cosmosoma auge* Linn. and *Didasys belae* Grote. The former is found in Florida, the West Indies, Central America and South America; the latter, so far as I am aware, has not been recorded outside the State of Florida." This, so far as I know, is all that has ever been published on the Lepidoptera of Cat Island. *Cosmosoma auge*, now known as *C. myrodora* Dyar, is now also known from Ship Island, Horn Island (Richmond 1962), Walthall, Wilkinson, and Covington Counties. *Didasys belae* Grt, is known from Mississippi only from Skinner's 1920 report of its occurrence on Cat Island and from Dr. Richmond's report (1962) of its occurrence on Horn Island.

Robert and Barbara Taylor (1965) summarized the results of their work at Biloxi as it related to the Sphingidae and some other moths. They took specimens representing 24 of the 40

species of sphinx moths then known from Mississippi. They took one male of *Epistor lugubris* (Linn), which is the only record of this species from the Gulf Coast other than that given by Richmond (1962).

Dr. Richmond's 1962 list included *Speyeria cybele cybele* (Fabr), the great spangled fritillary. The significance of this record has been discussed elsewhere (Mather 1966) and is summarized below: Mather and Mather (1958) listed *S. cybele cybele* (Fabr) among the butterflies that were not then known to have been found in but were of probable occurrence in Mississippi. They noted that Lambremont (1954) had reported one male taken at Lafayette, Louisiana, on 2 October 1931, in the collection at Southwestern Louisiana Institute; that H. A. Freeman (1951) had reported it as usually rather scarce in Arkansas; and that Roever had taken it in southwestern Tennessee. They noted that dos Passos and Grey (1947) had listed it for Tennessee, Illinois, Arkansas, and Oklahoma but not for Mississippi or Louisiana. Through the courtesy of Dr. Gordon Gunter, Director, Gulf Coast Research Laboratory, we were put in touch with Dr. E. A. Richmond whose work on Horn Island (1962) includes a reference to *S. cybele cybele*. Dr. Richmond said (in litt.) that his records indicate that this specimen was taken on 23 September 1944; they do not indicate the determiner of or the disposition of the specimen. Most of the determinations were made at the U. S. National Museum. In January 1962 a search was made in the collections there and it was established that no specimen of *S. cybele* from Mississippi could be found. It was then concluded that while this represented a probable occurrence it could not be regarded as a confirmed record. On 10 June 1963 at Oxford, Lafayette County, Mr. John Daniel took a male of *S. cybele cybele*. Thus *S. cybele cybele* is added to the list of butterflies known to have been taken in Mississippi.

In 1969-1970 there has been a most encouraging increase in the study of the Lepidoptera of the Gulf Coast regions of Mississippi and Louisiana, primarily through the work of Mr. Rick Kergosien of Bay St. Louis and Mr. Gayle Strickland of Baton Rouge. Each of these workers has established the occurrence of a number of species not previously known to exist in the area. Skinner (1920) noted that the two species he recorded for Cat Island were previously known from Florida, and, in one case, only from Florida. Strickland's work has revealed a number of species resident in coastal Louisiana not previously known to occur north of peninsular Florida.

Dr. Richmond and I corresponded between 1961 and 1967. I met him at the Gulf Coast Laboratory in April 1965. When we met he gave me a moth that he had collected on Horn Island the night before. I spread it and sent it to Dr. J. A. Powell of the University of California (Berkeley) who determined it as

Bactra verutana verutana Zell; it remains (Richmond 1968, p. 232) the only species of the Family Olethreutidae recorded from Horn Island.

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